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INDUSTRIAL FISHERY PRODUCTS

SITUATION AND OUTLOOK

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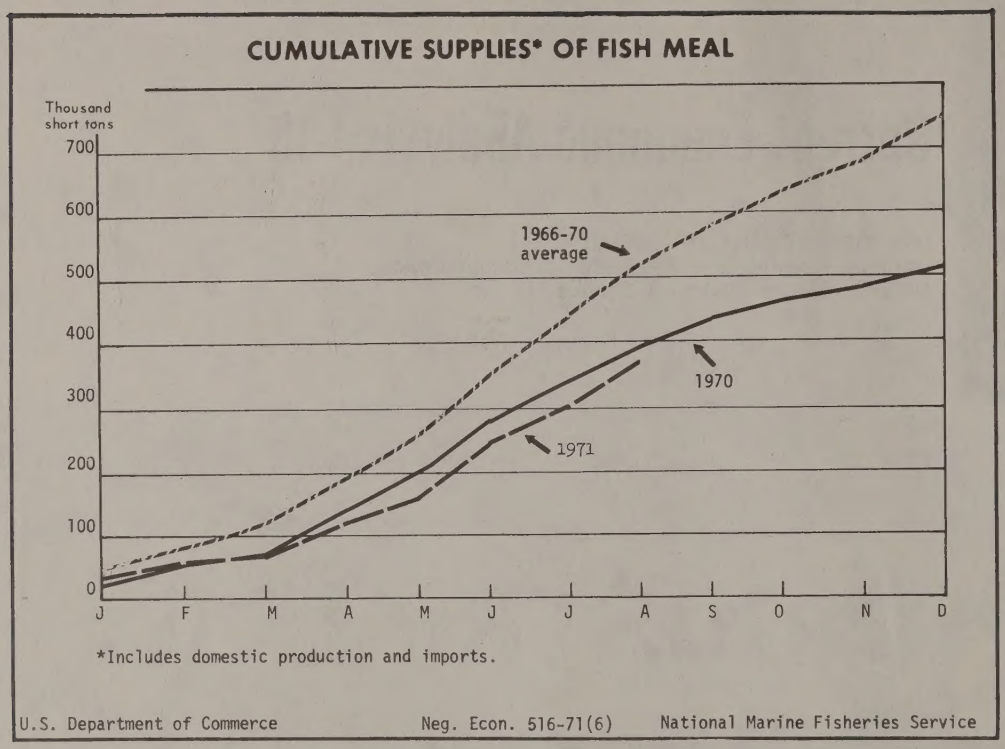

Figure 1

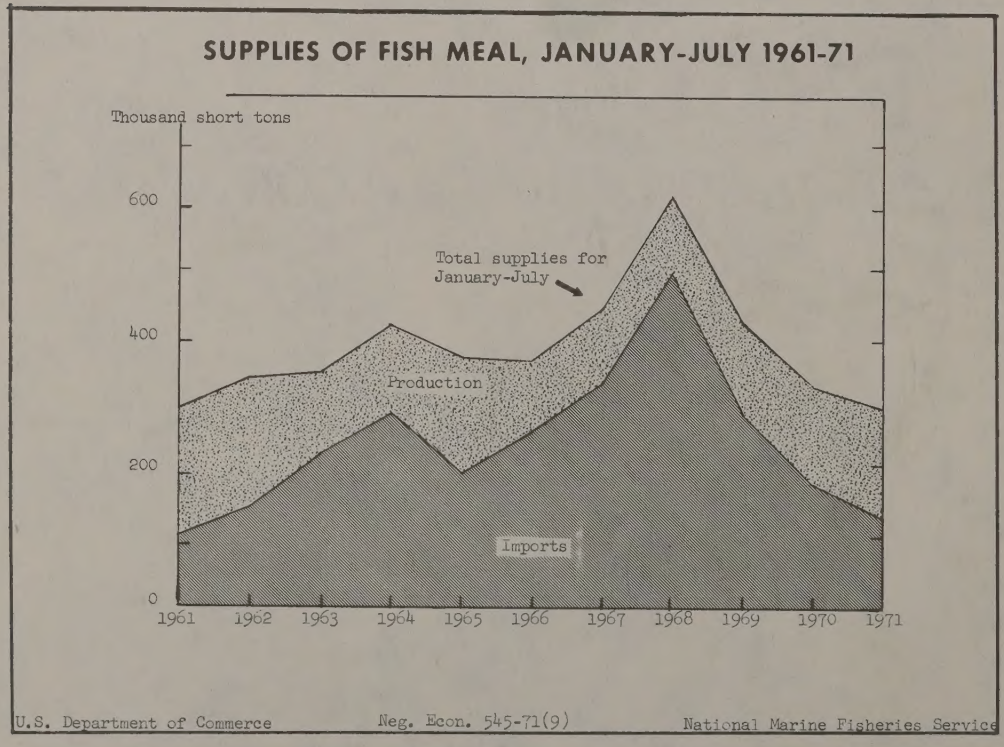

Figure 2

INDUSTRIAL FISHERY PRODUCTS

SITUATION AND OUTLOOK

Approved by the

National Marine Fisheries Service
Permanent Review Board

October 5, 1971

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Market Research and
Services Division

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SUMMARY

FISH MEAL

The total amount of fish meal available in the United States during January-July 1971 was about 304,400 tons 1/—down 11 percent from the same period last year. Domestic production was 163,600 tons—up 12 percent from last year and highest since 1962. About 81 percent of this production came from menhaden—compared to about 77 percent a year ago. The increase was due to increased landings of menhaden in the Gulf Coast area, which had the highest landings of menhaden in our records of 20 years.

The United States imported 140,700 tons of fish meal during January-July 1971—down 28 percent from 1970 and the lowest since 1961 for January-July. The most recent 5-year average of U.S. fish meal imports for this period was about 314,000 tons.

Imports were low because of the relatively high prices that have kept fish meal in an unfavorable competitive position compared to other feed ingredients. When prices were reduced, imports failed to increase because of importers' expectations for further price reductions and the bearish market situation for fish meal. Low imports can be attributed only partially to the relatively high domestic production.

The member countries of FEO 2/ produced an

1/ In general, domestic figures are expressed in short tons and foreign figures in metric tons. Short tons are used in this report, unless otherwise specified. To convert metric tons to short tons, multiply by 1.1023.

2/ Fishmeal Exporters Organization: member countries are Angola, Chile, Iceland, Norway, Peru, and South Africa.

estimated 1,708,100 metric tons of fish meal in January-July 1971—down 14 percent from last year and down 5 percent from the 1966—70 average for the same period. Peru produced most of the fish meal —about 944,400 metric tons. FEO countries exported about 1,202,800 metric tons—compared with 1,742,000 metric tons in January-July 1970. Stocks of fish meal held by FEO countries have been exceptionally high since April. August 1, 1971, stocks were more than twice the stocks held at the same date in 1970. Peru held about two-thirds of total FEO stocks. Peruvian stocks on September 1 were about 657,000 metric tons—compared with 164,000 metric tons in 1970.

Prices of fish meal declined steadily from January to July. Prices of menhaden meal dropped about $36 per ton during these months. Prices of Peruvian meal declined at the same time about $30 per ton. In September, the average price per ton was $160.30 for menhaden and $159.00 for Peruvian meal. The freeze on prices and wages for the period August 15 to November 12, 1971, probably will have little effect on prices of fish meal. According to the ruling, producers have the option of setting the price ceiling at a level not greater than the highest price at which at least 10 percent of the actual transactions during the 30-day period ending August 14, 1971, were concluded, or at the level of the prices that were in effect on May 25, 1970 (date given by the Economic Stabilization Act). This latter alternative gives high ceiling prices for U.S. processed meal because prices in May 1970 were record high. This situation and outlook report includes a special section on the executive orders issued August 15, 1971.

If the price of fish meal remains at the September level for the rest of the year, we estimate that about 90,000 to 110,000 tons of fish meal will be used in the United States during the fourth quarter. The apparent use for the fourth quarter last year was 78,400 tons. The total apparent use of fish meal for 1971 is expected to be 500,000 to 530,000 tons—compared to 508,000 tons in 1970.

FISH SOLUBLES

Supplies of fish solubles in the United States in January-July 1971 were about 64,700 tons, almost all of which was produced domestically. Prices of menhaden solubles fell from $51.25 per ton in January-March to $47.15 per ton in August. Prices continued to decline in September, indicating a relatively weak U.S. demand for solubles.

We estimate that about 16,000 to 17,000 tons of solubles will be produced during the fourth quarter of 1971. Total production of solubles for 1971 is estimated to be 113,000 to 116,000 tons.

FISH OIL

The production of fish oil in the United States in January-July 1971 was about 149.6 million pounds—up 39 percent from last year. About 15.7 million pounds of fish oil were used in the United States—4.6 million pounds less than January-July 1970. Exports were 93.7 million pounds—compared to 66.8 million pounds last year.

Prices of fish oil declined in the United States and in Europe during the first half of 1971, strengthened in July and August, but declined again in September. The average price of menhaden oil was 9.25 cents per pound in August and 9 cents per pound during the last half of September. The current bearish market situation is due to heavy supplies of fish oil and competing oils on the world market. Fish oil prices may, however, increase before the end of the fourth quarter of 1971.

FISH MEAL

Review: January-July 1971

Supply

Fish Meal Supplies in January-July—Down 11 Percent From 1970

Total U.S. supplies of fish meal in January-July were 304,400 tons—about 36,000 tons less than last year (table 1 and fig. 1). Supplies were down for the third consecutive year and the lowest since 1961 (fig. 2). Domestic production was up from the previous year, but imports were down. As a result, the share of total supplies provided by U.S. production in January-July 1971 was 54 percent—compared to 43 percent a year ago.

Supplies in August were an estimated 65,300 tons—nearly one-third more than in August last year. The increase was mainly due to an increase in production.

Production of Fish Meal—Highest Since 1962

U.S. fish meal plants produced about 163,600 tons of fish meal in January-July 1971 (table 2 and fig. 3). Meal produced from tuna and mackerel scrap and anchovy was about the same as a year ago, but production of menhaden meal—132,600 tons—was up nearly one-fifth from 1970 (table 3). About 83 percent of menhaden meal was produced in the Gulf Coast area (table 4).

Menhaden landings for January-July were 1.3 billion pounds—compared to 1.1 billion pounds a year ago (table 5). Landings in the first 7 months of 1971 were the highest since 1962.

Gulf Coast fishermen landed 1.1 billion pounds of menhaden—the highest landings on record for January-July and 34 percent higher than the previous record a year ago. High landings were due to a greater than usual number of 1- and 2-year-old fish. The Gulf Coast area had a good year class of menhaden in the previous few years. Atlantic Coast landings of menhaden in January-July were 212.1 million pounds—about 20 percent below a year ago. In contrast to the Gulf Coast area, the Atlantic Coast area has had a poor recruitment of menhaden in recent years. August landings of menhaden were 80.7 million pounds in the Atlantic Coast area and 336.1 million in the Gulf Coast area.

Table 1.—Total fish meal available in the United States: production plus imports, by month, 1969—71 1/

Month	1969	1970 2/	1971 2/
	Thousand short tons		
January	30.0	24.0	37.9
February	31.4	26.2	19.0
March	49.9	25.3	17.2
April	72.7	62.4	44.1
May	76.9	61.2	40.0
June	90.0	80.1	87.2
July	77.1	61.0	58.3
August	51.7	49.7	65.3
September	45.2	39.6	
October	38.8	30.1	
November	19.3	18.3	
December	20.4	30.0	
Total 3/	602.5	508.0	

1/ Excludes meal from shellfish.
2/ Preliminary.
3/ Figures may not add to total because of rounding.

Table 2.—U.S. production of fish meal by month, 1969—71 1/

Month	1969	1970 2/	1971 2/
	Thousand short tons		
January	2.8	3.9	4.6
February	3.9	4.8	3.2
March	4.7	5.9	3.9
April	14.7	7.5	12.3
May	31.8	26.5	29.4
June	35.4	46.5	57.0
July	40.2	50.7	52.5
August	33.5	39.4	50.7
September	35.9	28.7	
October	19.1	22.4	
November	12.7	12.3	
December	9.5	7.7	
Total 3/	244.1	256.5	

1/ Excludes meal from shellfish.
2/ Preliminary.
3/ Figures may not add to total because of rounding.

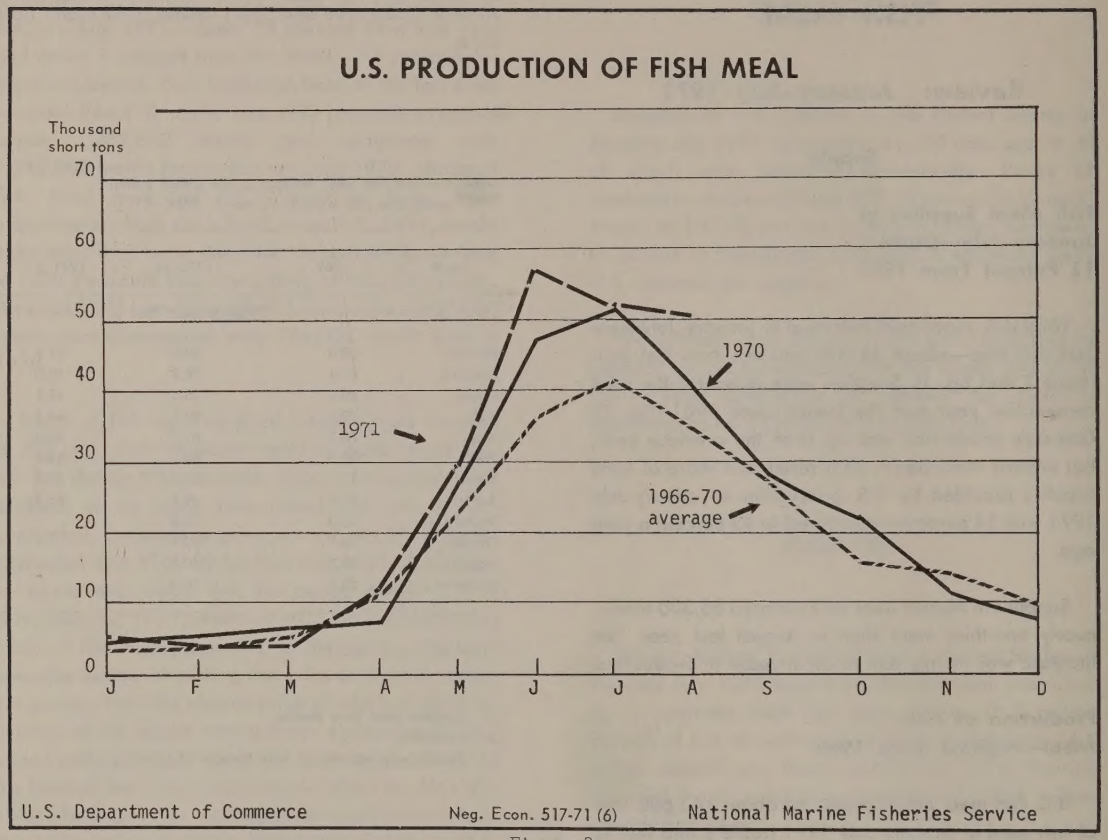

Figure 3

Table 3.—U.S. production of fish meal by raw material source, January-July, 1966—70 average, 1970, and 1971

Source	Production			Percent of total production		
	1966—70 average	1970 1/	1971 1/	1966—70 average	1970	1971
	Thousand short tons			Percent		
Menhaden 2/	80.9	112.3	132.6	64.9	76.9	81.1
Tuna, mackerel, and anchovy	19.0	20.3	20.5	15.3	13.9	12.5
Unclassified	24.6	13.4	10.5	19.8	9.2	6.4
Total	124.5	146.0	163.6	100.0	100.0	100.0

1/ Preliminary.
2/ Includes a small quantity of fish meal made from other species.

The fishing season for anchovy opened August 1 in California for the Northern Permit Area and September 15 for the Southern Permit Area. Landings through September 26 were about 726 tons, about one-sixth of landings last year. The landings were low because vessel owners and plant operators had not reached agreement on the exvessel price of anchovy for the season. The quota for the 1971—72 season will remain at 110,000 tons, but it is subject to review. Landings for the 1970—71 season, which ended May 15, 1971, were only 80,000 tons.

Table 4.—Production of menhaden meal by area and by month, 1969—71 1/

Month	Atlantic Coast			Gulf Coast			Total 4/		
	1969	1970 2/	1971 2/	1969	1970 2/	1971 2/	1969	1970 2/	1971 2/
	Thousand short tons								
January	—	—	—	—	—	—	—	—	—
February	—	—	—	—	—	—	—	—	—
March	—	—	—	—	—	—	—	—	—
April	3/	0.7	0.8	4.8	2.6	7.2	4.8	3.2	8.0
May	2.4	4.3	2.1	20.7	16.6	23.1	23.1	20.9	25.2
June	4.7	14.4	11.5	23.3	28.3	40.6	28.0	42.6	52.1
July	6.0	9.6	7.7	26.3	36.0	39.5	32.3	45.6	47.2
August	4.7	9.3	10.1	19.3	24.1	34.6	24.0	33.4	44.7
September	3.2	8.9		22.6	12.4		25.9	21.3	
October	7.2	7.1		3.7	6.2		10.9	13.3	
November	7.1	5.9		—	—		7.1	5.9	
December	3.5	2.4		—	—		3.5	2.4	
Total 4/	39.0	62.4		120.5	126.2		159.5	188.5	

1/ Includes a small amount of meal from other species.
2/ Preliminary.
3/ Data combined with Gulf Coast to avoid disclosing figures from individual companies.
4/ Figures may not add to total because of rounding.

Table 5.—Menhaden landings by area, January-July, 1966—70 average, 1970, and 1971

Area	1966—70 average	1970 1/	1971 1/	Percent of total menhaden landings: 1966—70 average	1970	1971
	Million pounds			Percent		
Atlantic Coast	168.1	266.4	212.1	21.9	25.0	16.5
Gulf Coast	599.9	800.6	1,076.3	78.1	75.0	83.5
Total 2/	768.0	1,067.0	1,288.4	100.0	100.0	100.0

1/ Preliminary.
2/ Figures may not add to total because of rounding.

Imports of Fish Meal—Lowest Since 1961

Imports of fish meal were 140,700 tons during January-July 1971—down more than one-fourth from the same period in 1970 and lowest since 1961 (table 6 and fig. 4). Imports have been exceptionally low since late 1969 due to the high prices of fish meal. Although prices of fish meal declined between January and July 1971, U.S. imports did not increase, but declined further. Lower imports were due to expectations of a further decline in prices and the apparent advantage in the reduction of existing U.S. inventories. In addition, some U.S. feed mixers have expressed doubts about the quality of imported meal. Doubts about the quality were based on the knowledge that Peru has had large

Table 6.—U.S. imports of fish meal by month, 1969—71

Month	1969	1970 1/	1971 1/
	Thousand short tons		
January	27.2	20.1	33.3
February	27.6	21.4	15.8
March	45.2	19.4	13.3
April	58.0	54.9	31.8
May	45.1	34.7	10.5
June	53.6	33.5	30.2
July	36.8	10.2	5.8
August	18.3	10.3	14.7
September	9.3	10.9	
October	19.7	7.8	
November	6.6	6.0	
December	11.0	22.3	
Total 2/	358.4	251.5	

1/ Preliminary.
2/ Figures may not add to total because of rounding.

stocks of fish meal for several months, a period long enough for quality to deteriorate. This factor may have affected the quantities imported. The discovery of contaminated fish meal in July, discussed below, apparently made feed mixers more apprehensive about fish meal.

Peru was the major source of imports during January-July 1971. About 110,000 tons of fish meal were imported from Peru—compared to 133,600 tons a year ago (table 8 and fig. 5). There were no fish meal imports from Peru in July. Fish meal imports from Canada declined also. Only about 30,000 tons were imported in January-July 1971 from Canada—compared to 40,000 tons last year. There were no imports from Norway, Chile, and South Africa.

Table 7.—U.S. imports of fish meal as a percent of total fish meal available 1/ in the United States, by month, 1969—71

Month	1969	1970 2/	1971 2/
		Percent	
January	90.7	83.8	87.9
February	87.6	81.7	83.2
March	90.6	76.7	79.2
April	79.8	88.0	73.4
May	58.6	56.7	26.2
June	60.3	41.8	34.6
July	47.8	16.7	9.9
August	35.3	20.7	22.5
September	20.6	27.5	
October	50.8	25.9	
November	34.2	32.8	
December	53.7	74.3	
Average 3/	59.5	49.5	

1/ Production plus imports.
2/ Preliminary.
3/ Weighted average.

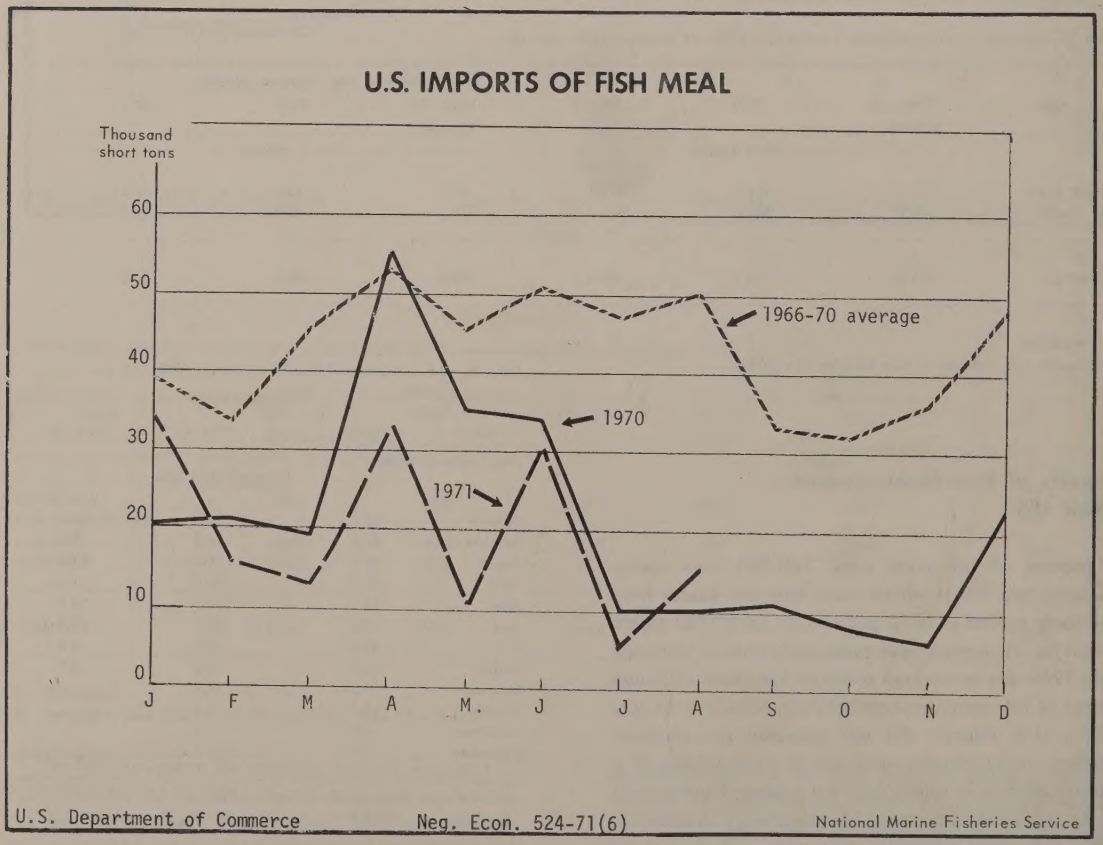

Figure 4

Table 8.—U.S. imports of fish meal by country of origin, January-July, 1966—70 average, 1970, and 1971

Country of Origin	Quantity			Percent of total imports		
	1966—70 average	1970	1971 1/	1966—70 average	1970	1971
	Thousand short tons			Percent		
Canada	31.2	40.0	29.5	9.9	20.6	21.0
Chile	32.3	11.6	—	10.3	6.0	—
Norway	19.2	7.3	—	6.1	3.8	—
Peru	225.0	133.6	110.0	71.8	68.7	78.1
Other	6.0	1.8	1.2	1.9	0.9	0.9
Total 2/	313.7	194.3	140.7	100.0	100.0	100.0

1/ Preliminary.
2/ Figures may not add to total because of rounding.

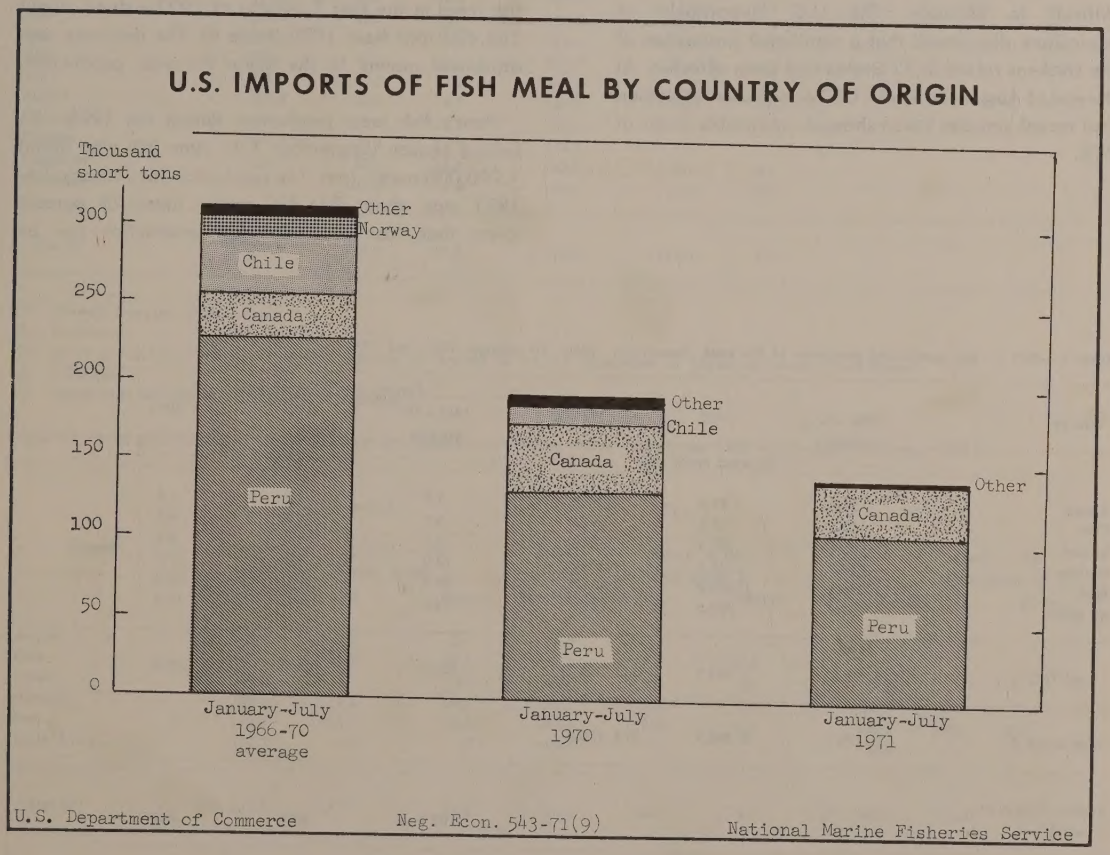

Figure 5

Contamination in Chickens—From Imported Fish Meal

Contamination of broilers was discovered in North Carolina and brought to the attention of the Food and Drug Administration and U.S. Department of Agriculture in mid-July. This contamination was caused by a chemical, polychlorinated biphenyl, known as PCB. The contamination was traced to the import terminal for Peruvian fish meal in Wilmington, North Carolina, where PCB had been leaking on fish meal. PCB is used as a heat transfer agent in equipment such as sterilizers used to control salmonella in fish meal. This contamination involved only Peruvian fish meal treated in the Wilmington terminal. After the discovery of the source of contamination, some 16,000 tons of fish meal shippped from this terminal were recalled for tests.

The damage caused by the contaminated meal is difficult to estimate. The U.S. Department of Agriculture discovered that a significant proportion of the chickens raised in 12 States had been affected. At the end of August, however, USDA inspectors indicated that recent samples taken showed acceptable levels of PCB.

World Fish Meal Production—Down From 1970

Fish meal production of the world's major producing countries in January-July 1971 was an estimated 2,120,000 metric tons—down about 270,000 tons from the same period last year. These production figures do not include the People's Republic of China, the U.S.S.R., Japan, and countries with relatively small production, which do not report on a monthly basis. The major countries producing less in the first 7 months of 1971 than in 1970 were Peru, South Africa, and Canada.

The member countries of the Fishmeal Exporters Organization (FEO) made about 81 percent of the estimated world fish meal in January-July—compared to 83 percent in 1970. The total production of the member countries was an estimated 1,708,100 tons of fish meal in the first 7 months of 1971—down about 285,400 tons from 1970 (table 9). The decrease was attributed mainly to the lower Peruvian production.

Peru's fish meal production during the 1970—71 fishing season (September 1 to June 30) was about 1,900,000 metric tons. The production for January-July 1971 was about 944,400 metric tons—29 percent lower than last year. The low production can be

Table 9.—FEO 1/ and total world production of fish meal, January-July, 1966—70 average, 1970, and 1971

Country	Thousand metric tons			Percent of FEO production		
	1966—70 average	1970	1971 2/	1966—70 average	1970	1971
Angola	33.5	35.5	3/27.0	1.9	1.8	1.6
Chile	113.6	96.6	163.0	6.3	4.8	9.5
Iceland	58.6	60.4	54.8	3.2	3.0	3.2
Norway	253.5	236.6	305.2	14.0	11.9	17.9
Peru	1,078.8	1,334.9	944.4	59.8	67.0	55.3
S. Africa	267.9	229.5	213.6	14.8	11.5	12.5
Total FEO 4/	1,806.0	1,993.5	3/1,708..	100.0	100.0	100.0
Total world 5/	2,178.9	2,392.7	3/2,120.0			
Percent FEO is of world				82.9	83.3	80.6

1/ Fishmeal Exporters Organization.
2/ Preliminary.
3/ Estimated.
4/ Figures may not add to total because of rounding.
5/ FEO countries plus Canada, Denmark, United Kingdom, United States, and West Germany.

attributed to closure of the anchovy fishing season in January and February, catch quotas, and other fishing restrictions. Because of the excellent catch, the original catch quota of 9.5 million metric tons of anchovies for the 1970—71 season was gradually increased to 11 million metric tons. According to industry sources, the total catch for reduction purposes during the season was, however, 12.3 million metric tons. Considering the relatively high catch figures, the reported figures on fish meal production seem to be low. It is possible, however, that some raw material was stored for later production, or that the fish meal yield has been unusually low.

Norway's production of fish meal in January-July 1971 was about 305,200 metric tons—up about 29 percent from a year ago. The increase was due to large catches of capelin.

Table 10.—Total FEO 1/ exports of fish meal and FEO exports to the United States, by month, 1966—70 average, 1970, and 1971

Month	1966—70 average			1970			1971 2/		
	Total FEO exports	FEO exports to the United States 3/		Total FEO exports	FEO exports to the United States 3/		Total FEO exports	FEO exports to the United States 3/	
	Thousand metric tons		Percent	Thousand metric tons		Percent	Thousand metric tons		Percent
January	217.1	33.5	15.4	212.9	13.5	6.3	150.5	29.6	19.7
February	233.8	28.4	12.1	263.2	14.6	5.5	144.4	13.5	9.3
March	244.2	39.7	16.3	281.9	12.3	4.4	159.2	7.5	4.7
April	235.5	48.5	20.6	257.0	50.0	19.5	195.5	26.1	13.4
May	245.5	39.6	16.1	274.6	28.9	10.5	185.0	7.3	3.9
June	227.7	46.5	20.4	201.9	28.6	14.2	173.6	25.9	14.9
July	233.8	41.5	17.8	250.8	4.7	1.9	4/194.4	—	—
August	183.3	42.6	23.2	167.7	1.6	1.0			
September	166.9	26.5	15.9	134.1	1.9	1.4			
October	177.1	25.2	14.2	113.5	—	—			
November	202.7	32.1	15.8	162.5	0.2	0.1			
December	229.5	42.3	18.4	194.7	17.7	9.1			
Total 5/	2,597.0	446.4	17.2	2,515.0	174.0	6.9			

1/ Fishmeal Exporters Organization.
2/ Preliminary.
3/ Based on imports of fish meal from FEO countries as reported by the U.S. Department of Commerce, Bureau of the Census.
4/ Estimated.
5/ Figures may not add to total because of rounding.

Table 11.—Total FEO 1/ exports of fish meal and FEO exports to the United States, January-July, 1966—70 average, 1970, and 1971

Country	1966—70 average			1970			1971 2/		
	Total exports	Exports to the United States 3/		Total exports	Exports to the United States 3/		Total exports	Exports to the United States 3/	
	Thousand metric tons		Percent	Thousand metric tons		Percent	Thousand metric tons		Percent
Angola	34.4	0.1	5/	34.2	—	—	4/ 27.5	—	—
Chile	86.5	32.3	37.3	67.6	11.6	17.2	119.5	—	—
Iceland	60.9	5/	5/	48.4	5/	5/	43.5	—	—
Norway	189.0	19.2	10.2	124.2	7.3	5.9	159.1	—	—
Peru	1,114.7	225.0	20.2	1,342.5	133.6	10.0	806.2	110.0	13.6
South Africa	152.1	1.1	.7	125.8	—	—	47.0	—	—
Total 6/	1,637.6	277.7	17.0	1,742.4	152.6	8.8	4/1,202.8	110.0	9.1

1/ Fishmeal Exporters Organization.
2/ Preliminary.
3/ Based on imports of fish meal as reported by the U.S. Department of Commerce, Bureau of the Census.
4/ Estimated.
5/ Less than .05.
6/ Figures may not add to total because of rounding.

FEO Exports in January-July—Down 31 Percent From Last Year

The member countries of FEO exported an estimated 1,202,800 metric tons of fish meal in January-July 1971—down about 540,000 tons from 1970 (tables 10 and 11). The drop in exports was mainly due to low exports from Peru. Peru exported about 806,200 metric tons of fish meal in the first 7 months of 1971—compared to 1,342,500 metric tons last year. The reason for the low exports was that the high prices of fish meal asked by the Peruvian Government export organization caused buyers to use other feed ingredients. Because of its much lower exports made up 67 percent of the total FEO exports in January-July 1971—compared to 77 percent last year.

West Germany continued to be Peru's major market in January-July 1971 and took about 188,200 metric tons or 23 percent of Peru's exports of fish meal. Peru's fish meal exports to the East European countries were about 249,700 metric tons during the first 7 months of 1971—nearly the same as last year.

The United States imported 110,000 tons of fish meal from Peru in January-July this year—23,600 tons less than during the same period in 1970.

FEO Fish Meal Stocks Nearly Double a Year Ago

The member countries of FEO held an estimated 1,201,600 metric tons of fish meal on August 1, 1971,—compared to 499,100 tons a year ago (table 12 and fig. 6). Stocks have been exceptionally high since April.

Peru held about 769,400 metric tons on August 1 this year—compared to 281,500 tons a year ago. The highest Peruvian stocks on record were 1,013,600 metric tons on May 1, 1971. The reason for the high stocks in Peru this year was that since September 1970 exports have been relatively small compared to production.

The monthly stock-sales ratios of Peru and Norway were relatively high in 1971. Peru had the average stock-sales ratio of 6.8:1 during January-July 1971—compared to 2.5:1 last year (table 13). Norway's ratio during the first 7 months of this year averaged 7.2:1, while the average was 3.8:1 last year. These relatively high stock-sales ratios indicate that the rate of turnover of the stocks has declined and stocks of fish meal are carried longer than normal. The rise of stock-sales ratios could lead to higher operating costs for producers through interest, insurance, and cost of storage space. In addition, the working capital tied up in inventories makes operations of fish meal producers more difficult.

Table 12.--FEO 1/ fish meal stocks held August 1, 1966-70 average, 1970, and 1971

Country	1966-70 average	1970	1971 2/	Percent of total FEO stocks: 1966-70 average	1970	1971
	Thousand metric tons			Percent		
Angola	5.4	7.7	3/4.0	0.9	1.5	0.3
Chile	35.9	20.7	74.1	5.9	4.1	6.2
Iceland	14.7	10.5	12.2	2.4	2.1	1.0
Norway	141.9	134.1	238.3	23.2	26.9	19.8
Peru	324.4	281.5	769.4	52.8	56.5	64.1
South Africa	90.5	44.5	103.7	14.8	8.9	8.6
Total 4/	612.8	499.1	1,201.6	100.0	100.0	100.0

1/ Fishmeal Exporters Organization.
2/ Preliminary.
3/ Estimated.
4/ Figures may not add to total because of rounding.

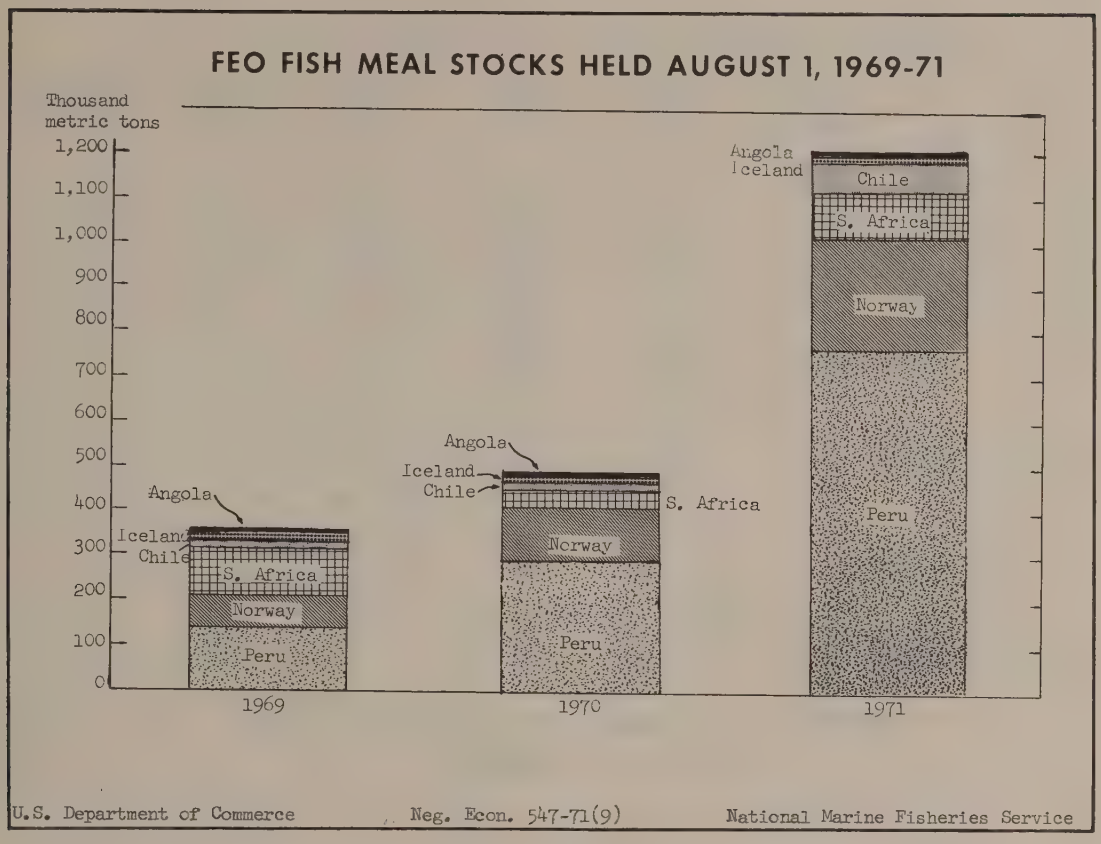

Figure 6

Table 13.—Stock-sales ratios 1/ in FEO countries, by month, 1970, and 1971 2/

Month	Angola		Chile		Iceland		Norway		Peru		South Africa		Total FEO	
	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971	1970	1971
	Ratio													
January	1.39	1.43	4.11	4.39	0.52	0.85	1.50	2.29	2.27	6.05	1.17	1.64	2.09	4.62
February	1.06	0.69	3.22	2.62	.94	2.20	1.65	4.06	2.13	5.52	0.82	1.19	1.85	3.95
March	3.25	1.29	2.56	2.00	.64	.97	1.91	4.87	2.04	7.46	.69	0.68	1.87	4.16
April	1.38	1.75	2.79	3.53	1.26	1.75	2.79	9.24	2.78	6.53	1.30	1.47	2.53	4.55
May	2.46	2.32	2.10	3.31	1.17	1.50	6.07	8.63	2.94	7.62	1.05	3.05	2.72	6.61
June	1.17	1.50	1.57	2.23	5.86	3.40	6.72	12.18	3.70	8.30	.88	2.60	3.23	6.85
July	2.40	1.09	2.79	4.61	1.95	2.95	5.67	8.83	1.88	5.78	1.18	5.42	2.15	5.93
August	2.14		4.65		1.43		6.00		1.86		1.41		2.38	
September	1.42		5.07		2.46		8.31		2.52		1.15		3.04	
October	1.77		1.52		1.22		5.64		7.40		.99		5.03	
November	1.83		2.02		3.45		4.93		5.03		.56		4.22	
December	1.04		2.81		1.79		3.70		4.29		1.97		3.90	
Average	1.78		2.93		1.89		4.57		3.24		1.10		2.92	

1/ Average of beginning and end of month stocks: exports plus local consumption.
2/ Preliminary.

Table 14.—Broiler chick placements in 22 States, and average broiler price at the farm, by month, 1969—71

Month	1969		1970		1971 1/	
	Chicks placed	Broiler price	Chicks placed	Broiler price	Chicks placed	Broiler price
	Million	Cents/lb.	Million	Cents/lb.	Million	Cents/lb.
January	201.2	14.1	288.5	14.8	280.5	13.0
February	211.8	14.9	240.7	14.3	224.7	13.7
March	282.9	15.1	251.4	14.8	236.2	13.7
April	234.0	14.7	257.4	13.7	244.7	13.6
May	295.9	15.5	318.6	13.9	305.2	14.3
June	235.3	15.9	252.5	13.3	245.1	14.9
July	220.4	17.5	230.6	13.6	287.6	15.9
August	265.4	16.5	280.5	13.2	229.5	14.3
September	204.5	15.7	198.6	13.4	215.5	
October	204.8	14.8	242.9	12.8		
November	270.6	14.4	217.2	12.9		
December	219.4	13.6	221.9	11.8		
Total placements 2/ and average price 3/	2,846.2	15.2	3,000.9	13.5		

1/ Preliminary.
2/ Figures may not add to total because of rounding.
3/ Weighted average.

Sources: Commercial Broilers:Annual Production and Weekly Placements, U.S. Department of Agriculture, Statistical Reporting Service, and Poultry and Egg Situation . U.S. Department of Agriculture. Economic Research Service.

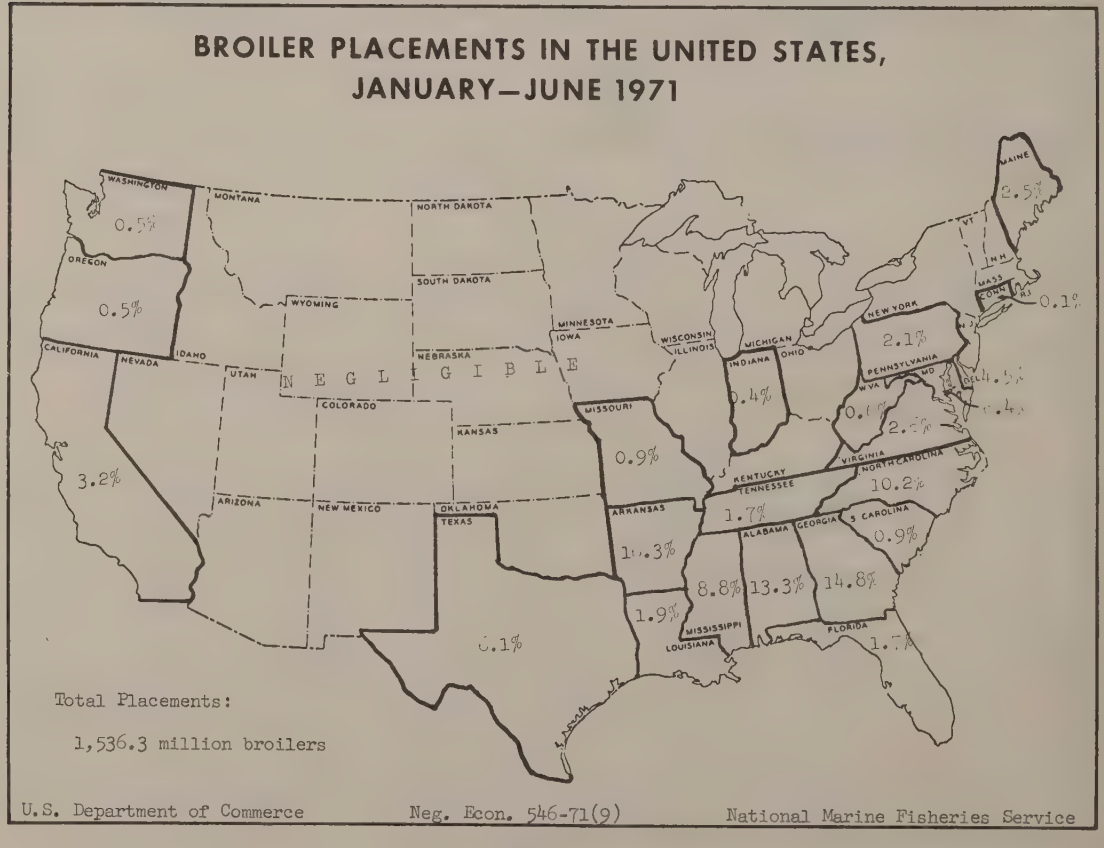

Figure 7

Broiler Chick Placements—Down Slightly From a Year Ago

About 1.82 billion broiler chicks were placed on farms in the leading broiler-producing States in the first 7 months of 1971—slightly less than the number placed during the same period last year (table 14). Although broiler prices increased from the January low of 13 cents per pound to 16 cents in July, and the prices of feed slipped slightly, industry sources indicated that broiler producers in some areas considered the cost of producing broilers too high. Broiler placements were down in April-June, especially in North Carolina, Georgia, and Texas. Southeastern States were still the major broiler-growing areas in January-June and thus the major markets for broiler feed (fig. 7).

Slightly fewer broilers on feed this year than a year ago was only a partial reason for the low apparent consumption of fish meal in January-July 1971. Although fish meal prices declined during the first 7 months of this year, the average ratio of fish meal price to soybean meal price declined only slightly from last year. This factor and a bearish market for fish meal during January-July causing expectations for further price cuts were important reasons for the decrease in the apparent use of fish meal.

Soybean Meal Prices Below a Year Ago

The monthly prices of 50 percent soybean meal at Decatur, Ill., averaged $2.40 per ton below a year ago in January-July 1971 (table 15). This year prices have not fluctuated as much as last year thus indicating a relatively stable supply-demand relation for soybean meal. Prices were seasonally high in July averaging $90 per ton—$2.50 less than a year ago. Prices declined again in August and were $80 per ton at the end of the month.

Ratios of the price of fish meal to the price of soybean meal have been lower than a year ago since February (table 16). The ratio was 1.72:1 in July, the lowest ratio since the end of 1968 when imports were record high. The reduction in the price ratio indicates a notable improvement in the competitive position of fish meal.

Table 15.—Average monthly price of soybean meal 1/ at Decatur, Ill., 1969–71

Month	1969	1970	1971
	Dollars per short ton		
January	79.50	97.60	86.10
February	78.40	95.60	82.40
March	80.10	79.60	82.00
April	81.30	83.10	80.50
May	84.90	78.90	84.80
June	88.20	82.70	87.60
July	86.20	92.50	90.00
August	84.10	92.50	84.20
September	82.70	88.20	
October	82.10	83.80	
November	76.90	82.50	
December	90.40	88.20	
Average 2/	82.90	87.10	

1/ 50 percent protein, bulk.
2/ Simple average.

Source: Feed Market News, U.S. Department of Agriculture, Consumer and Marketing Service, Grain Division.

Table 16.—Ratio of Peruvian fish meal price 1/ to soybean meal price 2/, by month, 1969–71

Month	1969	1970	1971
	Price ratio		
January	1.75	2.02	2.14
February	1.80	1.92	2.17
March	1.75	2.42	2.16
April	1.80	2.38	2.20
May	1.90	2.56	2.00
June	1.90	2.37	1.79
July	2.01	2.01	1.72
August	2.05	1.94	1.90
September	2.08	2.09	
October	2.36	2.26	
November	2.63	2.28	
December	2.26	2.11	
Average	1.89	2.24	

1/ F.o.b. East Coast ports, 65 percent protein, as quoted at New York City.
2/ Wholesale at Decatur, Ill., 50 percent protein, bulk.

Fish Meal Prices Decline

The price of menhaden meal, as quoted by brokers at New York City, declined from an average of $186.50 per ton in January to $150.10 per ton, f.o.b. East Coast and Gulf points in July. Prices then increased to an average of $160.30 in September (table 17 and fig. 8).

The price of Peruvian fish meal declined from an average of $184.10 per ton in January to $154.50 per ton, f.o.b. East Coast ports, in July. The average price for Peruvian meal in September was $159 per ton (table 18 and fig. 8).

Average monthly prices per ton of 60 percent tuna and mackerel meal at Los Angeles declined from $150 in January-April to $138 in July (table 19).

Average wholesale prices for Peruvian fish meal in Hamburg, West Germany, declined from $189.50 in January to $157.40 per ton in the middle of June. The average price was about $160 for July and $159.25 for August (table 20 and fig. 9).

Table 17.—Average monthly price of menhaden meal 1/ f.o.b. East Coast and Gulf points, 1969—71

Month	1969	1970 2/	1971 2/
	Dollars per short ton		
January	149.25	195.90	4/186.50
February	153.00	196.50	4/184.20
March	153.00	189.90	180.00
April	3/154.00	197.50	174.10
May	174.00	197.50	169.20
June	172.60	193.80	153.60
July	171.90	179.00	150.10
August	168.90	172.90	159.20
September	171.60	177.80	160.30
October	189.30	187.50	
November	200.10	189.10	
December	199.25	187.50	
Average 5/	174.30	184.80	

1/ 60 percent protein, bagged, as quoted by brokers at New York City.
2/ Bulk.
3/ Nominal price as presented in the Oil, Paint, and Drug Reporter
4/ Mainly meal at Gulf points.
5/ Average weighted by monthly production of menhaden meal.

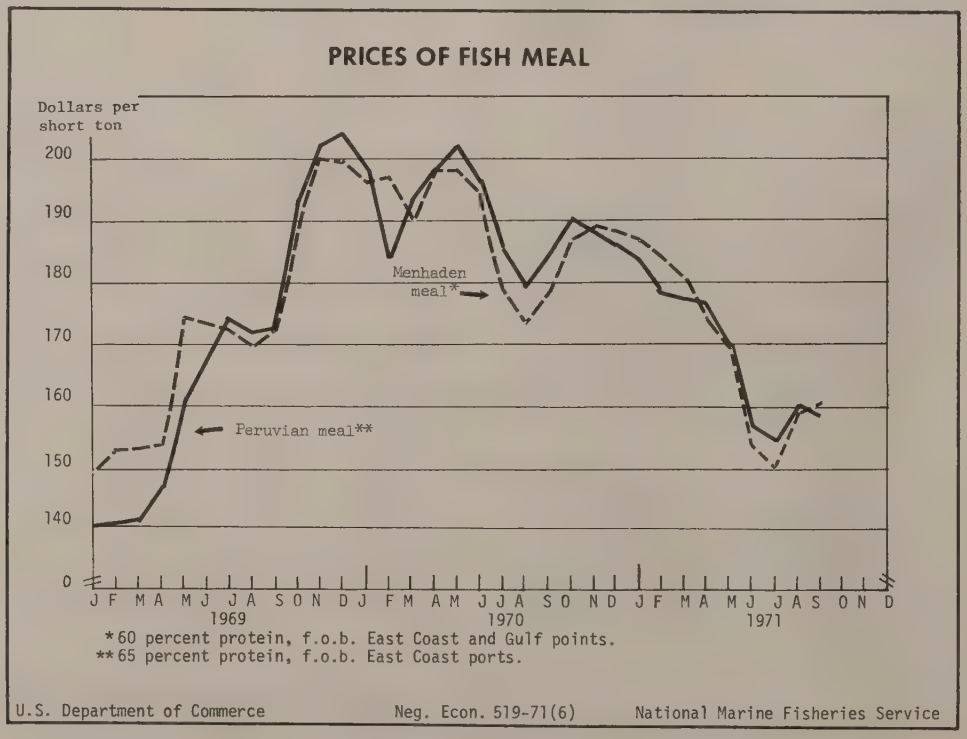
PRICES OF FISH MEAL
Dollars per short ton
200
190
180
170
160
150
140
0
Menhaden meal*
Peruvian meal**
J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D
1969
1970
1971
*60 percent protein, f.o.b. East Coast and Gulf points.
**65 percent protein, f.o.b. East Coast ports.
U.S. Department of Commerce
Neg. Econ. 519-71(6)
National Marine Fisheries Service

Figure 8

Table 18.—Average monthly price of Peruvian fish meal 1/ f.o.b. East Coast ports, 1969—71

Month	1969 2/	1970 3/	1971 4/
	Dollars per short ton		
January	139.50	197.50	184.10
February	141.00	183.50	178.90
March	140.50	192.70	177.30
April	146.80	198.00	177.00
May	161.00	202.10	169.40
June	168.00	195.80	156.80
July	173.50	185.90	154.50
August	172.10	179.10	160.10
September	172.00	184.00	159.00
October	193.40	189.80	
November	202.40	187.80	
December	204.00	186.40	
Average 5/	157.10	194.70	

1/ 65 percent protein, f.o.b. East Coast ports.
2/ Bagged.
3/ January through March bagged, April bulk, May through July bulk and bagged, August through December bulk.
4/ Bulk.
5/ Average weighted by monthly imports of Peruvian fish meal.

Table 19.—Average monthly price of tuna and mackerel meal 1/ at Los Angeles, 1969—71

Month	1969	1970	1971 2/
	Dollars per short ton		
January	132.60	172.50	150.00
February	135.00	172.50	150.00
March	133.80	177.00	150.00
April	127.80	178.50	150.00
May	138.60	180.00	147.60
June	145.80	180.00	144.00
July	147.00	180.00	138.00
August	147.00	168.00	135.00
September	150.00	165.00	135.00
October	168.00	162.00	
November	177.00	161.00	
December	172.20	159.00	
Average 3/	146.15	170.15	

1/ 60 percent protein, bagged, as quoted by brokers at Los Angeles.
2/ Bulk.
3/ Average weighted by monthly production.

Table 20.—Prices of Peruvian fish meal in the United States and in Europe, by week, 1971

Beginning date of the week	United States f.o.b. East Coast and Gulf ports 1/	Hamburg wholesale price 2/
	Dollars per short ton	
January 4	186.0	192.5
" 11	183.5	188.5
" 18	185.0	188.5
" 25	182.5	188.5
February 1	182.0	188.5
" 8	182.0	186.5
" 15	181.0	186.5
" 22	178.0	186.5
March 1	177.3	184.0
" 8	178.5	182.0
" 15	179.0	182.0
" 22	178.0	177.0
" 29	178.0	174.0
April 5	178.0	172.0
" 12	178.0	167.0
" 19	177.0	167.0
" 26	175.5	171.0
May 3	173.0	168.5
" 10	169.0	170.0
" 17	169.0	172.0
" 24	166.0	167.0
" 31	160.0	166.5
June 7	160.0	163.0
" 14	157.5	157.4
" 21	153.5	160.9
" 28	153.0	158.8
July 5	153.0	158.7
" 12	154.5	159.8
" 19	153.0	160.3
" 26	157.5	160.5
August 2	160.5	161.4
" 9	161.5	158.1
" 16	160.5	158.4
" 23	159.5	158.1
" 30	158.5	157.0
September 6	159.0	156.8
" 13	159.0	157.9
" 20	159.0	159.0
" 27	159.0	160.0

1/ As quoted by brokers in New York City.
2/ Converted from DM per 100 kilograms; concurrent rate of exchange was used.

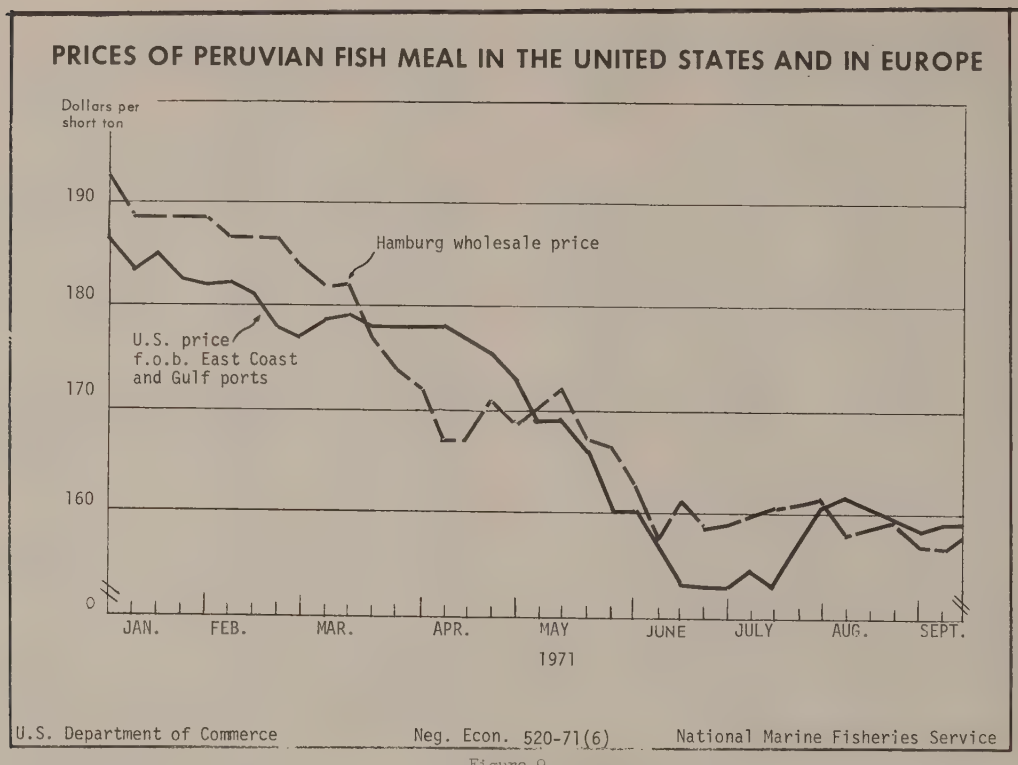

Figure 9

Outlook: October-December 1971

Supply

We estimate that about 40,000 to 45,000 tons of fish meal will be produced in the United States during the fourth quarter of 1971. Menhaden meal will comprise about 65 percent of the fourth quarter fish meal production. Third quarter production of fish meal will likely be about 130,000 to 135,000 tons. Total production for the year is estimated to be about 280,000 to 290,000 tons—compared to 256,500 tons a year ago.

U.S. production of fish meal through August was running about 14 percent above last year. If the weather does not bring adverse surprises in fishing, we could expect the October production to be at about last year's level. The October forecast for the Gulf Coast area promises reasonably good fishing conditions although precipitation and storm activity are expected to be slightly higher than a year ago.

Fish meal production in November and December is concentrated in North Carolina as the menhaden season ends in other areas. According to NMFS biologists, with good weather this year's catch in North Carolina could substantially improve over last year.

We estimate that about 65,000 to 80,000 tons of fish meal will be imported during the fourth quarter—compared to the exceptionally low imports of 36,000 tons last year and the 1966—70 average of 115,000 tons. This assumes that the dock strikes at Gulf and East Coast ports will be solved promptly. Contracts between the International Longshoremen's Association and shippers expired September 30 resulting in a dock strike at Gulf and East Coast ports. As of the first week of October, there was still hope to solve the strike through constructive negotiations. A dock strike in the West Coast ports, which began July 1, was halted on October 6 by an 80-day restraining order, provided for in the Taft-Hartley Act.

About 150,000 tons of Peruvian meal was recently purchased by the United States importers. Part of this meal will likely not arrive during this year. Imports during the third quarter will probably be about 40,000 to 45,000 tons in spite of the fact that no meal came from Peru in July. Peru will, however, be the main source of imports for the rest of the year. If these estimates are correct, total U.S. fish meal imports for 1971 will be 235,000 to 260,000 tons—compared to 251,500 tons in 1970.

The Peruvian fishing season opened September 1. The Government imposed a quota of 4.8 million metric tons for the September-December period; the monthly catch quota is 1.2 million metric tons. Fishing is not allowed on Friday, Saturday, and Sunday, and during the rest of the week each seiner is allowed only one trip per day. The fishery will be closed in January and February 1972. Because of the excellent catches, the quota for September was filled on September 22, and fishing was suspended.

Fish meal stocks in Peru were about 657,000 metric tons on September 1, when the fishing season began. If the fishermen catch the quota, it will add about 240,000 metric tons to the inventories each month up to the end of the year. On the other hand, several export contracts will moderate the growth of the inventories. Shipments of a contract of 150,000 metric tons to the People's Republic of China began in August. Shipments will be made every 2 weeks. Contracts of 100,000 metric tons to Cuba, an estimated 140,000 metric tons to Czechoslovakia and 150,000 metric tons to West Germany were made during the past 4 months. Recently reported contracts include 150,000 metric tons to the United States, an additional 60,000 metric tons to West Germany and 200,000 metric tons to Spain. These shipments will not necessarily be completed by the end of 1971, but they nevertheless reduce the pressure of the high stocks in Peru. Because part of the enormous stocks in Peru did not have adequate storage facilities, the spoilage of some fish meal has been unavoidable. About 50,000 metric tons of deteriorated fish meal are to be used as fertilizer.

Demand

At current prices, it appears that fish meal is a fairly good buy for use in feed rations. If prices remain at the September level, the use of fish meal could be about 100,000 to 110,000 tons during the fourth quarter.

Taking into consideration factors discussed previously, the use of fish meal in the United States during the fourth quarter may remain relatively low, perhaps 90,000 tons. In such a case, importers would carry some additional stocks. The total use of fish meal for 1971 is expected to be 500,000 to 530,000 tons —compared to 508,000 tons in 1970.

FISH SOLUBLES

Review: January-July 1971

Supply

Supplies of Fish Solubles—Up 22 Percent

Total fish solubles available in the United States during January-July 1971 were about 64,800 tons—compared to 53,200 tons a year ago (table 21). Domestic production accounted for almost all the supplies. About 52,200 tons of solubles were made from menhaden.

Demand

Prices—Declining Slowly

Prices of menhaden solubles, as quoted by brokers in New York City, were an average of $51.25 per ton during the months of January to March. Prices declined to $47.15 per ton in August (table 22 and fig. 10). This price decline was proportionately less than the drop in

Table 21.—Total fish solubles available in the United States: production plus imports, by month, 1969—71

Month	1969	1970	1971 1/
	Thousand short tons		
January	0.6	1.3	1.3
February	1.4	2.1	1.3
March	1.6	2.5	1.6
April	5.0	3.1	5.3
May	11.3	9.8	13.2
June	12.6	15.7	22.7
July	11.7	18.8	19.5
August	10.5	14.0	19.5
September	12.8	11.3	
October	6.5	9.8	
November	4.0	4.0	
December	3.9	2.9	
Total 2/	81.9	95.1	

1/ Preliminary
2/ Figures may not add to total because of rounding.

menhaden meal prices. In a comparison of the 31 percent protein content of solubles and the 60 percent protein content of menhaden meal, the price difference of these products suggests that solubles are still a relatively inexpensive source of protein. The use of fish solubles is limited by the expense of changing feed processing operations to include small quantities of solubles in the feed.

Outlook: October-December 1971

Based on production in the first part of the year, our estimate is that 16,000 to 17,000 tons of fish solubles will be produced during the fourth quarter of 1971—compared to 16,600 tons last year. About two-thirds of the solubles will come from menhaden. Total production of fish solubles for 1971 is estimated to be 113,000 to 116,000 tons—compared to 94,600 tons in 1970.

Because of large supplies and relatively sluggish demand for solubles, producers are having marketing difficulties at the current prices. Producers of fish meal and solubles probably will add solubles to the meal press cake in the manufacturing process. The decline in prices of solubles likely will continue.

Table 22.—Average monthly price of menhaden solubles 1/ f.o.b. East Coast plants, 1969—71

Month	1969	1970	1971
	Dollars per short ton		
January	51.25	51.25	51.25
February	51.25	50.90	51.25
March	49.40	51.75	51.25
April	47.75	52.80	50.60
May	47.50	2/54.70	48.90
June	49.75	2/54.30	49.00
July	51.25	51.90	48.10
August	49.40	50.45	47.15
September	48.75	48.70	45.05
October	50.60	50.60	
November	51.25	50.65	
December	52.50	49.70	
Average 3/	49.60	51.90	

1/ In tank cars; prices quoted by brokers at New York City.
2/ F.o.b. Gulf Coast plants only.
3/ Weighted average.

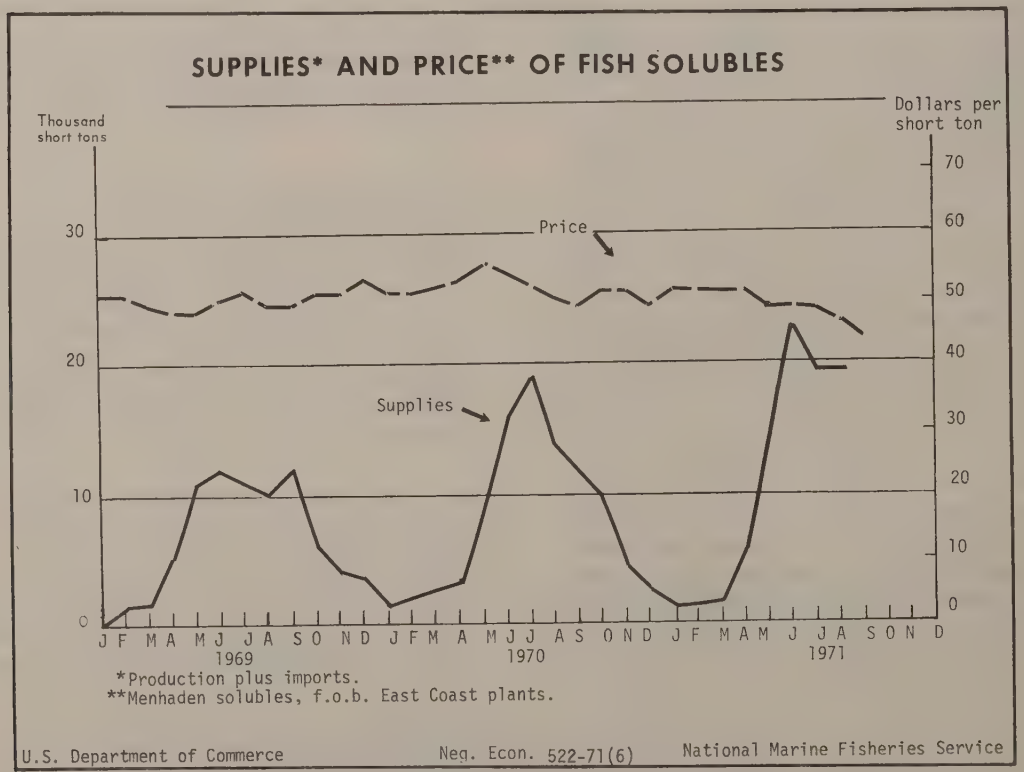

Figure 10

FISH OIL

Review: January-July 1971

Supply

Fish Oil Production—Up 39 Percent

The domestic industry produced 149.6 million pounds of fish oil in January-July 1971—compared to 107.5 million pounds last year (table 23). The increase was mainly due to higher production of menhaden oil, although the production of oil from anchovy, mackerel, and tuna also increased from 1970. About 95 percent of fish oil was made from menhaden (table 24).

In August, U.S. production of fish oils was 58.5 million pounds—17.4 million pounds more than in August 1970.

Demand

U.S. Use of Fish Oil—Down 24 Percent

About 15.7 million pounds of fish oil were used in the United States for industrial purposes during January-July 1971—down 23 percent from last year (table 25). The relatively high price of menhaden oil in comparison to the prices of competing oils was the main reason for the lower use. Lower prices of linseed oil increased its use as a substitute for fish oil.

Exports of Fish Oil—Up 40 Percent

Exports of fish oil were 93.7 million pounds in January-July 1971—26.9 million pounds more than a year ago (table 26). About 72 percent of this oil went to the Netherlands—compared to about 36 percent last year (table 27). About 13.2 million pounds of the oil went to Sweden—compared to 9.3 million pounds last year. The United Kingdom received 5.6 million pounds of fish oil from the United States in January-July 1971—about the same as last year. Fish oil is used in these countries mainly in the production of margarine and shortening.

Table 23.—U.S. production of fish oil 1/ by month, 1969—71

Month	1969	1970 2/	1971 2/
	Million pounds		
January	0.6	0.6	1.4
February	.6	.6	0.5
March	.6	.6	.5
April	6.1	3.0	9.5
May	20.8	21.8	27.3
June	28.0	39.9	54.8
July	30.0	40.9	55.3
August	26.7	41.1	58.5
September	28.9	27.4	
October	13.8	19.4	
November	8.5	7.3	
December	5.0	3.0	
Total 3/	169.8	205.8	

1/ Includes a small amount of whale and sperm oil.
2/ Preliminary.
3/ Figures may not add to total because of rounding.

Table 24.—U.S. fish oil production by raw material source, January-July, 1966—70 average, 1970, and 1971

Source	1966—70 average	1970 1/	1971 1/	Percent of total U.S. production: 1966—70 average	1970	1971
	Million pounds			Percent		
Menhaden	75.0	102.0	142.7	89.8	95.0	95.4
Tuna, mackerel, and anchovy	2.5	2.2	3.6	3.0	2.0	2.4
Unclassified	6.0	3.2	3.3	7.2	3.0	2.2
Total 3/	83.5	107.5	149.6	100.0	100.0	100.0

1/ Preliminary.
2/ Figures may not add to total because of rounding.

Prices

Oil Prices Down in First Half of the Year

The average monthly price of menhaden oil, as quoted by brokers at New York City, declined steadily during the first half of 1971 to 8.05 cents per pound in June (table 28 and fig. 11). Prices then increased slightly to an average of 9.25 cents per pound in August. At the end of September, prices were about 9 cents per pound.

The average prices of tuna and mackerel oil declined slightly in May and June. The average monthly price in July, which was 6 cents per pound, was the same as the price for January through April (table 29).

Prices of fish oil in Europe declined also during January-June, increased in July and August, but weakened again during September. Declining prices were due to increased export supplies of fish oil and competing vegetable oils.

Exports of fish oil in August were 43.1 million pounds —compared to 31.1 million pounds a year ago.

Table 25.—Industrial use of fish oil in the United States by month, 1969—71 1/

Month	1969	1970 2/	1971 2/
	Million pounds		
January	1.8	3.1	2.2
February	3.1	2.9	2.1
March	3.1	2.4	2.0
April	3.2	2.8	2.0
May	1.9	3.2	1.9
June	3.9	3.2	2.8
July	2.2	2.7	2.7
August	2.5	2.0	
September	3.3	2.8	
October	3.0	2.4	
November	3.3	1.9	
December	2.8	2.0	
Total 3/	34.1	31.4	

1/ Includes marine mammal oil other than sperm oil and some hydrogenated fats (vegetable and animal) and other fats and oils in process.
2/ Preliminary.
3/ Figures may not add to total because of rounding.

Table 26.—U.S. exports of fish oil 1/ by month, 1969—71

Month	1969	1970	1971 2/
	Million pounds		
January	4.0	11.1	32.2
February	8.9	.4	4.9
March	19.8	13.9	.2
April	21.1	4.3	6.1
May	8.8	4.4	4.6
June	15.5	2.4	10.9
July	19.3	30.3	34.7
August	24.7	31.1	43.1
September	7.9	37.8	
October	5.7	.2	
November	33.3	17.9	
December	27.0	4.9	
Total 3/	196.1	158.8	

1/ Excluding whale oil.
2/ Preliminary.
3/ Figures may not add to total because of rounding.

Table 27.—U.S. exports of fish oil by country of destination, January-July, 1966—70 average, 1970, and 1971

Country	1966—70 average	1970	1971 2/	Percent of total U.S. exports: 1966—70 average	1970	1971
	Million pounds			Percent		
Canada	0.9	0.8	0.8	1.6	1.2	0.9
Netherlands	24.9	24.2	67.2	44.0	36.2	71.7
Norway	4.3	14.8	—	7.6	22.1	—
Sweden	9.9	9.3	13.2	17.5	13.9	14.1
United Kingdom	6.1	5.9	5.6	10.8	8.8	5.9
West Germany	4.1	3.0	4.5	7.3	4.5	4.7
Other	6.3	8.9	2.5	11.2	13.3	2.7
Total 3/	56.5	66.8	93.7	100.0	100.0	100.0

1/ Excluding whale oil.
2/ Preliminary.
3/ Figures may not add to total because of rounding.

Table 28.—Average monthly price of menhaden oil 1/ f.o.b. East Coast plants, 1969—71

Month	1969	1970	1971
	Cents per pound		
January	4.70	8.75	10.40
February	5.00	2/9.25	10.30
March	5.20	3/8.90	10.20
April	5.30	3/9.70	9.65
May	5.25	3/10.30	8.95
June	5.20	10.30	8.05
July	5.25	10.40	8.60
August	5.65	10.20	9.25
September	6.10	9.70	9.15
October	6.75	9.75	
November	8.20	10.10	
December	8.50	10.60	
Average 4/	5.75	10.15	

1/ Crude oil in tank cars; prices quoted by brokers at New York City.
2/ Asking price.
3/ F.o.b. Gulf Coast plants.
4/ Weighted average.

Table 29.—Average monthly price of tuna and mackerel oil 1/ at Los Angeles, 1969—71

Month	1969	1970	1971
	Cents per pound		
January	3.25	3.25	6.00
February	3.10	3.50	6.00
March	3.00	3.65	6.00
April	3.00	4.10	6.00
May	3.00	4.70	5.90
June	3.00	4.75	5.50
July	3.00	4.75	6.00
August	3.10	4.95	5.25
September	3.25	5.25	5.25
October	3.25	5.25	
November	3.00	5.50	
December	3.00	6.00	
Average 2/	3.10	4.95	

1/ Crude oil, f.o.b. plant; prices quoted by brokers at Los Angeles.
2/ Weighted average.

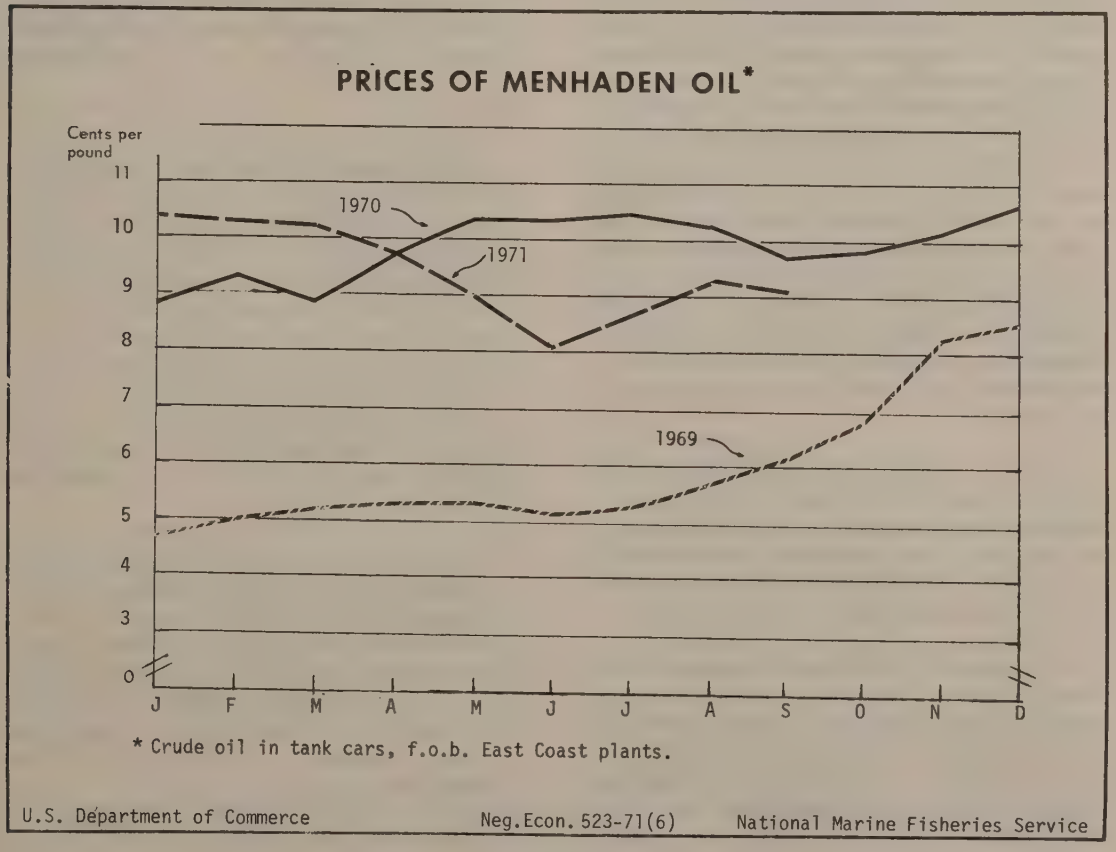

Figure 11

Outlook: October-December 1971

Supply

U.S. production of fish oil is estimated to be about 30 million pounds in the fourth quarter of 1971. Production in October-December last year was 29.7 million pounds. Fish oil production during the third quarter of 1971 will likely be 145 to 150 million pounds. On the basis of these estimates, the total production of fish oil for 1971 will be 270 to 280 million pounds. These estimates assume that the weather is favorable during October in the Gulf Coast area and during November and December in the South Atlantic Coast area.

Demand

Heavy supplies of fish oil and vegetable oils in world markets and the unsettled international currency situation contribute to the current bearish market for fish oil. This situation began to develop at the end of August and continued in September. It was reflected in a decline of the amount of fish oil bought in Europe. Prices of competing oils in relation to the price of fish oil have an important influence on the consumption of fish oil. Owing to the high demand, soybean oil prices estimated the use of fish oils in Europe during this period. However, at the end of August, prices of soybean oil began to drop. European prices for soybean oil declined from $134 per metric ton in mid-August to $123 in mid-September. Apparently some shift from the use of fish oil to the use of soybean oil took place. In addition, large shipments of Canadian rapeseed to Europe in September suggest a continuation of the increase in the use of rapeseed oil in Europe.

The bearish market for fish oil, however, may not continue through the fourth quarter of the year. The new domestic soybean crop is estimated to be relatively low compared to the expected use. This factor may increase prices of soybean oil and strengthen the position of the competing oils, such as fish oil.

The domestic use of fish oil may increase slightly from a year ago if the bearish situation in world markets continues. According to industry sources, a sizeable increase in the domestic use would take place only if menhaden oil prices went below 7 cents per pound, assuming prices of competing oils stay at the current levels.

EFFECTS OF THE NEW ECONOMIC POLICY ON THE DOMESTIC FISH MEAL AND OIL INDUSTRY

The major points of the executive orders issued August 15, 1971, were: (1) the wage-price freeze for 90 days, (2) the 10 percent surcharge on imports, and (3) the floating of the dollar. The effect of each of these on the fish meal and oil industry is discussed below.

Price Freeze

For most businesses, a price ceiling was fixed at the highest level that prevailed during the 30-day period ending August 14, 1971. At least 10 percent of the sales must have been at the ceiling price. If there were no other alternatives in determining the price ceiling, the ruling would have been rather harsh on the domestic fish meal industry. Prices of menhaden meal, as quoted by brokers in New York City, have declined since January and in July reached the lowest monthly average since January 1969, $150.10 per ton, f.o.b. East Coast and Gulf points. The average price for the 30-day period ending August 14 was about $158 per ton.

The Economic Stabilization Act of 1970, which gave the President authority to stabilize prices, says that the price ceiling cannot be at levels below those existing on May 25, 1970. During the last week of May 1970, menhaden meal prices were $195 to $200 per ton, bulk, close to the alltime high. Peruvian meal sold at $195 to $205 per ton in late May 1970. This alternative puts the price ceiling so high that, from a practical point of view, fish meal prices are not likely to reach their ceiling during the price freeze. It made possible an increase in menhaden meal prices in September. Prices ranged from $162 to $168 per ton, bulk, f.o.b. East Coast and Gulf points, during the second week of September.

If the price of imported meal increases, the importer may pass this increase on to his customers so long as he does not change the form of the product. Thus, if the price of imported meal rises, the feed formulator cannot pass on the fish meal price increase in his price for feed. Feed formulators are in the same position as many processors—they may have to pay higher prices for their raw materials while having the price of their finished product fixed.

Soybean meal is a major competitor of fish meal in the protein feed market. The highest weekly price during the 30-day period before the freeze for 50 percent soybean meal at Decatur, Ill., was $91.50 per ton. Since the May 25, 1970, price of about $77 per ton is lower, the ceiling is determined by the price at which the least 10 percent of the meal was sold during the 30-day base period.

The prices of tuna, mackerel, and anchovy meal have followed the patterns of menhaden meal. Prices of these meals were the highest in history in May, June, and July 1970—$174 per ton in bulk form and $180 per ton, bagged, as quoted by brokers at Los Angeles. The current price is about $135 per ton, bulk.

With regard to menhaden oil, the price ceiling determined by May 25, 1970 prices is about 10 percent higher than the average price that prevailed during the 30-day base period before the price freeze. About 90 percent of the U.S. production of menhaden oil is exported. Export prices are exempted from the freeze. However, the menhaden oil producer who sells the oil to an exporter (middleman) is bound by the freeze. Thus, if the world price increases, the exporter gets all the benefit.

Import Surcharge

The 10 percent surcharge on imports applies only to products on which a tariff is currently levied. Since fish meal enters the United States duty free, the 10 percent surcharge does not apply. Imported fish oils are, however, affected by the ruling. For example, tariff rates for anchovy oil increased from 6 percent ad valorem to 16 percent. The quantity of imported fish oils is very small (4,200 tons in 1970) and mainly includes oils which do not compete directly with menhaden oil in the United States. Thus, the effect of the surcharge on the domestic fish meal and oil industry is negligible.

The surcharge on imported fish oil may be passed on to the consumer. If the importer chooses to pass on the surcharge rather than absorb it, he must indicate the exact surcharge on his invoices. The surcharge will not apply to stocks on hand on August 15, shipments on the high seas on that date, or shipments at West Coast ports tied up by the dock strike.

Floating of the Dollar

When evaluating the effect of the freely fluctuating dollar on the domestic fish meal and fish oil industry, the focus turns to Peru, the major source of imported fish meal in the United States. About 70 percent of total U.S. fish meal supplies (1966—70 average) is imported. Annual imports of fish meal from Peru averaged nearly 350,000 tons in 1966—70—67 percent of the total U.S. imports of fish meal.

After President Nixon's August 15 announcement suspending the fixed relationship between the dollar and gold, Peru continued to retain the parity of its currency, the sol, with the dollar. As long as the value of the sol is fixed to the dollar, the floating of the dollar will not directly affect trade between the United States and Peru.

The rise in the value of the currencies of other countries in terms of dollars and sols tends to improve Peruvian exports of fish meal to these countries. This situation has prevailed between Peru and West Germany, Peru's largest market for fish meal, since mid-May when West Germany floated the mark. Peruvian fish meal has become cheaper to the West German importer without any additional reduction of prices on the Peruvians' part. An increase in Peru's fish meal exports may slow the price reduction of Peruvian meal forced by high stocks of fish meal in Peru. From the point of view of U.S. fish meal producers this means at least some relief from the worry of drastic price drops in the U.S. markets for fish meal.

Similar to the Peruvian exporters, United States exporters of fish oil enjoy improved markets in those countries where the dollar has depreciated. If this results in increased sales, producers benefit. But if the world prices of menhaden oil increase, the producer gets the increase only up to the price ceiling if he sells to an exporter. If he exports directly, the export price is exempt from a ceiling.

Phase 2 of the New Economic Policy

Phase 2 of the stabilization program, as outlined by the President on October 7, continues to curb price and wage increases after the 90-day price freeze ends on November 13. The Cost of Living Council will have overall supervision of the program as it does for the present wage-price freeze. The control of prices is left to a new Price Commission which is made up of persons outside the Government. The Price Commission will establish guidelines to restrain price increases to the minimum and to decide specific cases of appeals and exemptions. The Commission will be backed by the authority of law to make their decisions hold.

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